

## The appraisal and enhancement of resilience modalities in middle adolescents within the school context

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*Middle adolescents are exposed to environments riddled with potential adversities which pervade their lives, adding to the challenges inherent in their developmental stage. They spend a significant time in school and therefore it is an appropriate context to foster, enhance, and develop emotional, social, and cognitive resilience competencies. There are limited psychological assessment instruments for the South African population that can be used to appraise the level of resilience modalities in middle adolescents. Our aim was to describe and explore the process of appraising, developing, and enhancing the modalities of resilience through the newly developed Resilience Enhancement Kit and the Resiliency Scale. The research was conducted from a combined qualitative and quantitative approach. The results indicated that there was an increase in the level of resilient functioning after administration of the Resilience Enhancement Kit and it therefore appeared to be successful in enhancing resilience modalities. The Resilience Enhancement Kit and Resiliency Scale could be administered by educational psychologists and teachers to assess and enhance resilience modalities and could be incorporated into the school curriculum.*

**Keywords:** appraisal; cognitive competence; emotional competence; middle adolescents; resilience; school context; social competence

### Introduction

South Africa is a country rich in historical, cultural, linguistic and ethnic diversity as well as different socio-economic rankings. In recent times, there has been a growing trend towards cultivating these diversities, focusing on the strengths of middle adolescents' functioning within their various ecosystems. The recent changes in South Africa brought about by political, economic and social transformation have had an enormous impact on the communities. There is a wealth of new opportunities for development in all sectors, but they also bring about various stressors of a changing society.

These changes are also pervading the lives of the middle adolescents, who are already challenged, according to Le Roux (1992:3), by the physical, cognitive, affective, social, emotional and aesthetic changes inherent to their developmental stage. Donald, Lazarus and Lolwana (1997:15) quote Burman, Reynolds, Dawes and Donald who are of the opinion that:

the challenges that South Africa faces encompass the full extent of social reconstruction. All the issues resulting therefrom have significant effects on the development of children and the development of the contextual disadvantaged, social problems and special needs.

Due to differences and levels of regulatory skills (resiliency), changes can have a positive or negative influence on a middle adolescent. Therefore the explora-

tory question in this research was to identify how the modalities of resilience of the middle adolescents could be appraised and enhanced to empower them in managing the changes and stresses in their lives.

Resilience is a complex construct that is defined in different ways by researchers in terms of it being a dynamic developmental process, disposition or capacity and a sustained positive outcome. Resilience is the capability to cope and rebound (bounce back) in the face of significant adversity, risk, trauma or stress. This concept is reiterated by Benard's (1997:2) definition of resilience which she states as

resilience is an accumulating matrix of capacities, resources, strengths, knowledge and adaptive skills that continues to grow over time, which equips an adolescent to cope despite personal vulnerabilities and adversities brought about by environmental conditions.

Resilience encompasses the middle adolescents' ability and disposition to effectively identify, utilize and manage emotional, social, and cognitive modalities as well as constructively and appropriately respond and flexibly adapt to life events marked by adversities, risks and challenges on a personal and environmental level. The interaction between the middle adolescents and their contexts elicits sustained constructive outcomes that include continuous learning (growing and renewing), fulfilment of needs and flexibly negotiating the situation. Resilience develops through gradual exposure to difficulties and stresses at a manageable level of intensity.

Benard (1995:1) is of opinion that all middle adolescents are born with an innate capacity to successfully overcome life's difficulties, in other words to be resilient. Even though resiliency is seen as an innate capacity, Hunter and Chandler (1999:5) indicated that resilient behaviour adapts with each developmental phase and can vary on a continuum of less optimum resilience to optimum resilience, based on the middle adolescent's developed skills and utilization of the support structures available to the middle adolescent.

The adolescent life stage can be separated into several ages, namely, early adolescence (10–12 years), mid-adolescence (13–16 years), and later adolescence (17–21 years).

Middle adolescents are the ages between 13 to 15 years characterised by a time of heightened self-awareness, sexual stirrings, peer bonding, risk taking and increased independence. The middle years is a dynamic time when young people ride the waves from childhood to adulthood (Council of North-West Education, 2001:1).

The middle adolescents' level of resilience may differ in changing circumstances, for example, an adolescent may be very resilient when it comes to resisting unfavourable peer-pressure but less resilient when managing academic stress in their life. The middle adolescent must be able to draw upon his/her biological, psychological and environmental resources to successfully adapt and cope with the challenges of life. Resilience modalities should therefore be appraised to be able to identify those modalities that are less optimal, to be able to enhance them, as well as to aid the middle adoles-

cent in using appropriate resilience modalities in various contexts. Howard and Johnson (2003:4) stated that protective factors which influenced resilience in middle adolescence included personal attributes, beliefs and coping behaviours as well as the influence of family, the school and communities. The inherent characteristics and competencies that foster resilience need to be developed by means of guidance and nurturing from parents, teachers and significant others. However, psychological services, responding to middle adolescents who are exposed to numerous environments riddled with potential risks and problems, have often functioned within a deficit model where a problem first has to arise and then rectification and rehabilitation of inharmonious relationships can begin. A paradigm shift is necessary to focus on the middle adolescents' strengths and competencies to help them rebound against the onslaughts of life. Held (2003:2) refers to Aspinwall, Staudinger, Ryff and Singer who feel

a psychology of human strengths should not be the research of how negative experience may be avoided or ignored, but rather how positive and negative experience may be interrelated. We underscore the need to move beyond false dichotomies that separate positive and negative features of the human condition, human well-being is fundamentally about the joining of these realms.

The focus therefore of positive psychology, which encompasses resilience, is to change from a fixation with only repairing problems and stressors in life to building on the best virtues of the middle adolescents' life.

The middle adolescents' school-related behaviour can be seen as a manifestation of the quality and actualization of their resilient modalities within the school context. According to Benard and Marshall (2001:4) resilience in middle adolescents within the school context is measured by manifested competence, self-regulation socially appropriate conduct and academic achievement. Due to the knowledge educational psychologists have regarding the development of middle adolescents, how they learn, and aspects that constitute and contribute to resilience, they can play a significant role in advising and guiding the significant role players in the school context to effectively develop and enhance the resilience modalities in middle adolescents.

### **Constituents of resilience**

The resilience capacities and competencies (which include attitudes, values, knowledge, and skills) are situated within the middle adolescent's emotional, social and cognitive modalities. Modalities refer to the differing and varying levels of middle adolescents' state or quality of being. Based on research from Benard (1995:1); Henderson (2002:3); Rouse (1998:2); Jew, Green and Kroger (1999:2); and Mangham, McGrath, Reid and Stewart (1995:8) the competencies that constitute resilience (*italicised*) were extrapolated and categorized into the following modalities:

### Emotional modality

Emotional competencies can be seen as the ability to accurately perceive, appraise, express and regulate emotion in a verbal and non-verbal manner to foster emotional growth and wellbeing. Weare (2000:68) reiterates the need for emotional competence and insight into personal emotional states in order to be well-integrated people who can build fulfilling relationships. The heightened emotionality is characteristic of the middle adolescents in their emerging development of self-identity and maturity. Middle adolescents become increasingly more sensitive and aware of their own and others emotions and how they display them during their interaction with their peers and significant others in this developmental stage. The emotional competencies include the following.

Emotional stability refers to the middle adolescent's emotional state being in equilibrium. Significant events could disturb the equilibrium and render the middle adolescent, lacking the necessary resiliency competencies, to become ineffectual in contending and adapting to the stressors in his or her life. According to the Virtual Wordnet Concepts (2002:2) the ability to *identify personal emotions* and those of others through perceptiveness and by being conscious of the meaning given to emotion-provoking situations, forms part of emotional stability. The insight into the rational or irrational emotional reaction to events in life and the necessary competencies with which to control it, is an important aspect of resilience. Showing *empathy* towards others, understanding and accepting others within their unique contexts will be an asset in resiliency. *Ego-control* and *ego-resiliency* is necessary to contend with emotional setbacks and reality testing. According to Huey and Weisz, (1994:404) it also includes internal locus of control that refers to a belief that the middle adolescent can control his or her actions and is not left to the mercy of the environment (contexts) alone.

### Social modality

Social competencies are needed for successful social adaptation.

Social competence is the range of interpersonal skills that help youth integrate feelings, thinking, and actions in order to achieve specific social and interpersonal goals. These skills include encoding relevant social cues; accurately interpreting those social cues; generating effective solutions to interpersonal problems; realistically anticipating consequences and potential obstacles to one's actions; and translating social decisions into effective behaviour (Catalano, Berglund, Ryan, Lonczak & Hawkins, 2002:16).

Social competency implies being socially perceptive and applying a variety of social behaviours in life. These competencies include the ability to form and maintain positive relationships with parents, teachers, peers, significant others and the community as a whole. The *ability to communicate on a verbal and non-verbal level* is important in order to understand received messages as well as conveying messages of intent. Having a *sense of humour* is an

important skill in relieving the effects of stress and maintaining favourable relationships. *Autonomy* is the ability and desire to accomplish tasks individually. *Working effectively within a group* is also an important social modality. *A sense of self-identity* is vital for the adolescent as it prevents them from succumbing to unfavourable peer pressure. A sense of identity will also enable the adolescent to fulfil his or her place in society. Self-efficacy enables middle adolescents to exercise a measure of control over their thoughts, feelings, motivation and actions. Efficacy helps determine how much effort middle adolescents will spend on an activity, how long they will persevere when confronting obstacles and adverse situations. *Self-perception* is the way in which a middle adolescent perceives himself or herself and it influences his or her self-motivation, self-worth, self-confidence and self-esteem.

### Cognitive modality

Middle adolescents are within the formal-operational phase of their cognitive development which requires them to adapt to their environment by self-regulatory processes of assimilation and accommodation of new and changing information and circumstances, some of which can be traumatic or stressful and lead to the emergence of resilient behaviour. Catalano *et al.* (2002:17) refer to the WT Grant Consortium on the School-Based Promotion of Competence which defines cognitive competency in two ways, namely, as

the ability to develop and apply the cognitive skills of self-talk, the reading and interpretation of social cues, using steps for problem-solving and decision-making, understanding the perspective of others, understanding behavioral norms, and a positive attitude toward life.

The second aspect of cognitive competence is related to "academic and intellectual achievement. The emphasis is on the development of core capacities including the ability to use logic, analytic thinking, and abstract reasoning". Therefore, cognitive competencies include the ability to *solve problems*, to plan and think critically, reflectively and creatively. Resilient middle adolescents have a *positive view of their personal future, a sense of purpose, goals and aspirations*. These favourable resiliency modalities create hope and motivate a middle adolescent to work hard for their future and overcome problems and obstacles. The middle adolescent's *thinking style* affects how they perceive and react to problems and difficulties and how they use their *meta-cognition* to address the adversities. "Non-resilient thinking styles can lead us to cling to inaccurate beliefs about the world and to inappropriate problem-solving strategies that burn through emotional energy and valuable resilience resources" (Kordich-Hall & Pearson., 2003:2). The way middle adolescents think about the negative events and experiences in their lives can influence the way in which they respond to the adversities of life.

Being able to utilize their internal resilience modalities effectively will empower middle adolescents, not only to survive against the odds, but also to elicit strengths and to excel in adverse situations. The research conducted

into the resilience of middle adolescents within the school context is rooted in various literary theoretical frameworks.

### **Theoretical framework**

The empirical research of the phenomenon referred to as resilience began in the early 1970s. It emerged from the research of risk and the detection of deficits distinctive to the medical model. According to Curtis and Cicchetti (2003:774), the research of resilience had its foundations in the psychodynamic and behavioural theoretical traditions that largely focused on risk and symptom treatment. Some of the terms often considered synonymous with resilience are coping, persistence, adaptation, and long-term success despite adverse circumstances and strengths.

According to Turner, Norman and Zunz, (1995:25) the concept of resilience model has developed through the years and is founded upon three theories of social and behavioural science, namely, those of the Social Learning Theory, Cognitive Behavioural Theory, and Health Realisation Theory. This research comprises the above-named theories and includes the ecological systems theory of Bröfenbrenner and the asset-based perspective as well as the positive psychology movement regarding resilience. There are however some concerns about the appropriateness and applicability of current research regarding resiliency.

Lewis (2000:3) indicates that resilience cannot be divorced from the cultural context of that society. Therefore, it is crucial for research to be undertaken in various countries to evaluate the similarities and differences in the aspects that compose resiliency.

Bartelt (1994:101) has some methodological apprehensions about how the concept of resilience is defined and measured.

Are the indicators (of resilience) measuring which they purport to measure, can the concept be empirically specified and offer consistent relationships with other variables that it is supposed to be related, or unrelated to? Successful adaptation is seen as evidence of resilience, and unsuccessful adaptation as an absence of resilience. Resilience itself, however, is never directly observed, it is always imputed. As an empirical concept, then, there is difficulty in identifying an unambiguous referent to this force/factor of resilience (Bartelt, 1994:101).

In the light of the question posed by Bartelt, Lewis (2000:4) is of opinion that researchers should identify aspects of a middle adolescents' experience that lead them to act in ways that are more resilient and encourage middle adolescents to learn from their experiences.

In this research the method of appraisal of resilience was based on aspects identified through literature as well as the aspects learners identified as contributing to their level of resilience which were based on their life experiences and cultural context. Newman and Blackburn (2002:10) are of opinion that the literature includes few accounts of specific strategies used to

promote resilience. This implies that there is a need to identify ways of enhancing and developing resilience. Therefore the aim in this ethnographic research was to describe and explore the process of how to appraise, develop and enhance the modalities of resilience of the South African middle adolescent in the school context (within a private school in South Africa). The research contributed to the development of the Resilience Enhancement Kit and Resiliency Scale.

### **Method**

This research was conducted from a combined quantitative and qualitative approach. These two approaches are seen as complementary to each other within a model, described by Creswell (1994:173), as a dominant-less-dominant model. "In this design the researcher presents the research with a single, dominant paradigm with one small component of the overall research drawn from the alternative paradigm" (Creswell, 1994:174). This implies that the research was mainly grounded in the qualitative approach but quantitative information was collected from statistical analysis of the participants.

The qualitative method of inquiry was utilized because the social and cultural phenomena within the context of the participant's perspectives and experiences had to be understood.

Interpretative research starts out with the assumption that access to reality (given or socially constructed) is only through social constructions such as language, consciousness and shared meanings" (Myers, 1997:6). Qualitative research is more flexible, responsive and open to contextual interpretation and therefore it was more suited for ascertaining the adolescent's emotional, social, and cognitive modalities of resiliency.

The aim of the quantitative approach was to measure the social world objectively through scientific explanation. The quantitative method was used to ascertain the middle adolescents' perceived levels of resilient functioning before and after administering the Resilience Enhancement Kit.

### **Context and participants**

The education system in South Africa is divided between public, private, and home schooling. In South Africa, the learners experience a transition from primary school to high school at the age of 13–14 years, which is reflective of the middle adolescent phase. The exploration of this research problem was conducted by means of comparative data analysis and an in-depth interpretation of case studies. Case studies were chosen due to the flexible nature thereof for the varying contexts and meaning attribution of the multi-cultural group of middle adolescents. This research made use of a purposeful sampling as the dominant strategy in this qualitative research because it seeks information-rich cases, which can be studied in depth.

The target population was made up of 14-year-old middle adolescents in an inner-city school, located in Johannesburg. The school was chosen for its

diverse multi-cultural composition. Due to the smaller numbers of middle adolescents in a private school the whole Grade 8 group (n=30) was selected and could therefore not only be considered a purposeful sample but also a comprehensive sample, due to the manageability of the size and heterogeneous composition of the participants. There were 16 boys and nine girls who participated in the Resiliency Scale and the Resilience Enhancement Kit. The culture composition of the participants was nine black middle adolescents (six boys and three girls), nine white middle adolescents (six boys and three girls), four coloured middle adolescents (one boy and three girls) and three Indian boys.

### Data collection

The qualitative approach uses an inductive form of reasoning, which implies that a phenomenon is observed, data are collected, themes analysed and conclusions are drawn. In this research the qualitative method was used to explore the ways in which the middle adolescents' resilience modalities were enhanced and developed through the Resilience Enhancement Kit. Participation in the activities of the Resilience Enhancement Kit required that the middle adolescents draw upon their socially constructed prior knowledge as well as expressing their thoughts, feelings and behaviour from their frame of reference and phase of development. The learners were required to complete a self-reflective evaluation questionnaire after each session they participated in and the researcher gathered information by taking the role of a participant-observer, taking field notes regarding the participant's responses.

The quantitative method was used to ascertain the middle adolescents' perceived levels of resilient functioning. The following data collection strategies were used:

#### *Likert-type questionnaire*

A self-disclosure Likert-type scale (scale 1–4) was developed based on the literature on resiliency constituents found within the emotional, social, and cognitive modalities of middle adolescents. Two Resiliency Scales were presented, one for the learners and one for the teachers, to gain insight into how these different groups viewed the resilience modalities. The aim of the Resiliency Scale was to determine in the pre-test phase what the middle adolescents regarded as their level of resilience as well as the teachers' perception of their learners. Furthermore, it was used in the post-test phase to evaluate what effect the Resilience Enhancement Kit had on the perception of the middle adolescents regarding their level of resilience. The Resiliency Scale is divided into emotional, social, and cognitive competence, which forms part of the resilience modalities.

Care was taken to avoid overlapping questions in the questionnaire and to ensure that the degree of language difficulty was appropriate for the learners by asking five learners from Grades 9 to 10 (three boys and two girls) to

critically look at the questionnaire. Learners from Grades 9 and 10 were chosen as they also fell within the middle adolescent phase and all the Grade 8 learners were used as participants. Two teachers (other than the five participating teachers) that taught Grade 8 learners were asked to critically look at the teachers' Resiliency Scale and make any suggestions for modification. These five learners and the two teachers were asked semi-structured questions regarding the lucidity of the format of the scale, the difficulty of language and the time it took to complete the scale. The two teachers did not feel that there were any changes necessary. Feedback from the five learners resulted in simplifying the language of three of the sentences and adding a question regarding being able to create physical safety in an adverse situation. The attempt to manipulate answers based on the interpretation table by one of the Grade 9 learners resulted in omitting it during the testing phases with the Grade 8 group.

#### *Open-ended question*

An open-ended question was posed to all the middle adolescents to supplement the Resiliency Scale regarding what the middle adolescents felt contributed to their level of resilience. Their verbatim responses were analysed and categorized for the determinants that the middle adolescents felt contributed to their level of resilience. The middle adolescents' perceptions regarding their own resilience was ascertained as well as their views on what positive influences and aspects made them bounce back against adversities.

#### *Observation*

The middle adolescents' interaction with the presented material in the Resilience Enhancement Kit was observed. This provided the opportunity for the researcher to ascertain how they responded emotionally and behaviourally to the Resilience Enhancement Kit and whether the activities were successful or needed to be altered to make the Resilience Enhancement Kit more effective.

#### *Resilience Enhancement Kit design application*

The Resilience Enhancement Kit was structured according to a didactic lesson that made it accessible and practical for teachers and psychologists to ascertain the middle adolescents' prior knowledge, provide guided exposition of new knowledge through self-directed models (mind maps), and facilitate the application of acquired competencies to real life situations. The content for each session of the Resilience Enhancement Kit aimed to *identify, manage* and *utilize* apposite personal modalities (capacities, competencies and strengths) and assets within their contexts. Various methods of instruction and activities were utilized to accommodate the learners' multiple intelligences and strengths, for example, role-playing, debating, questionnaires, dramatization, character studies, self-reflection, interviews, group work, music, and game play. There were 12 sessions and each session was approximately an hour

long. The 30 middle adolescents were divided into three classes of 10 learners each. The teacher was also present during the administration of the sessions and participated as a facilitator during the activities.

### Content

The sessions were divided into *emotional competencies* that were comprised of identification, management and expression of emotions, empathy and ego-resiliency. The *social competencies* comprised positive relationships (establishing friendships and working in groups) and a sense of self. The *cognitive competencies* consisted of meta-cognition (problem solving, decision making and reframing of thoughts) as well as future expectations and goals. A session was utilized to consolidate the competencies gained throughout the sessions and was presented in the form of a board game.

### Data analysis

The methods of data generation, as discussed above, as well as the analysis thereof must be flexible, adaptable and sensitive to the social contexts of the participants. The qualitative data in this research originated from field notes (observations) made during the administration of the Resilience Enhancement Kit, which were filtered according to the focus of the research and the open-ended question to participants regarding what they perceived as having an influence on their resilient functioning. Qualitative data analysis is primarily an inductive process of organizing the data. This form of data analysis requires labelling, sorting and synthesising of the data obtained to be able to interpret the themes presented within the framework of the middle adolescents' developmental phase.

Tri-angular techniques in the social sciences attempt to map out, or explain more fully, the richness and complexity of human behaviour by studying it from more than one standpoint and making use of both quantitative and qualitative data. Triangulation is a powerful way of demonstrating concurrent validity, particularly in qualitative research (Cohen, Manion & Morrison, 2000:112).

Inter-rater reliability was achieved by means of triangulation in the case studies, through open-ended questions, the Likert-type pre-test and post-test (Resiliency Scale) after the Resilience Enhancement Kit had been administered. The pre- and post-tests were administered after a period had elapsed. Accuracy and reliability of the findings was scrutinized through analysing:

- Verbatim accounts of the participants through the open-ended question regarding what influences their level of resilience;
- comparing responses from the re-and post-test phase in the Resiliency Scale (Likert-type questionnaire);
- analysing responses from the open-ended evaluation questionnaire at the conclusion of each session when the middle adolescents were given the opportunity to reflect on what they had learnt and how they thought they

- could apply it to their everyday life;
- checking informally with participants to make sure of the meaning of what they said or did during the activities and what was observed was understood correctly by the researcher;
- agreement of data findings from a psychologist familiar with the research topic; and
- gaining information from multiple data sources such as observation and field notes.

## **Discussion of results**

### **Qualitative data analysis**

It was observed that the middle adolescents found the more complex bends of emotions difficult to identify and in the questionnaire regarding their emotions they chose the most familiar emotions to describe their feelings. Black middle adolescents appeared to enjoy the activities such as role-play, dramatization and music, which could be due to cultural differences, because music, dance and rhythm are an essential part of celebrations and daily living in black culture as a way of expressing themselves. The group activities revealed that there were middle adolescents who naturally took the lead and others sat quietly and allowed them to make their decisions for them, which could be attributed to temperament and group dynamics. Middle adolescents seemed unsure about their personal attributes (sense of self) and required assistance from the facilitator to function as a sounding board for their ideas and as a motivator in this time of identity formation. The middle adolescents were able to utilize cognition and apply it to identify problems within the school as well as solving these problems. However, the problems identified were limited and very concrete and the facilitator needed to encourage the learners to think more extensively. This difficulty experienced by the middle adolescents correlated with the views that the middle adolescents might not have been functioning in the formal operational stage of their development and they had difficulty with solving problems and making decisions with the future goals in mind.

The factors identified by the learners that influenced their level of resiliency included support of friends and family, having a sense of humour, scholastic success, sports, bonding with pets, listening to music and religion. However, three of the male participants did not feel they had any support systems and they indicated that they relied on alcohol, smoking cigarettes, playing war games and physical violence to make them feel that they had control over negative circumstances. The observations and replies from the evaluation forms indicated that the learners enjoyed participating in games and acting activities. This was due to the competitive nature of these activities (games) where they could participate on a social level. The learners' responses indicated that they did acquire the necessary competencies found in the Resilience Enhancement Kit. Critique given by the learners related to dislike

of sharing personal emotions, groups that argued at times and that some of the learners tried to disrupt the sessions.

#### Quantitative analysis of the Resiliency Scale responses

The female participants appeared to experience an increase in their competencies related to resilient functioning after participating in the Resilience Enhancement Kit (Figure 1). Six of the nine participants viewed themselves as very resilient and three participants viewed themselves as average in resilient functioning. Eight of the female participants showed a 4–17 point increase from the scores obtained in the pre-test to those of the post-test. One of the participants showed a 2-point decrease. The results indicated that the social competence (sense of self) was the primary area where the female participants experienced a need for further development followed by the emotional (ego-control) and then cognitive competence (future expectations).

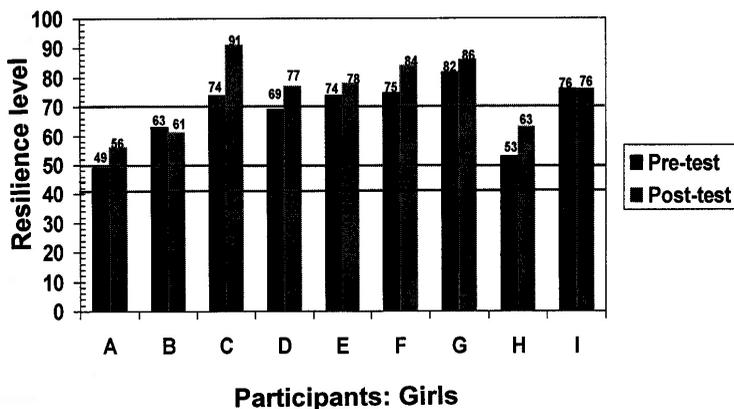


Figure 1 Resiliency scale

The male participants appeared to experience an increase in their competencies related to resilient functioning after participating in the Resilience Enhancement Kit (Figure 2). Twelve of the 16 participants viewed themselves as very resilient and four participants viewed themselves as average in resilient functioning. Twelve of the participants viewed themselves as average in resilient functioning. Twelve of the participants showed a 1–10 point increase from the scores obtained in the pre-test to that of the post-test. Four of the participants showed a 1–2 point decrease in their perception.

The results indicated that the competencies that the male participants felt needed further development related to emotional competence (identification,

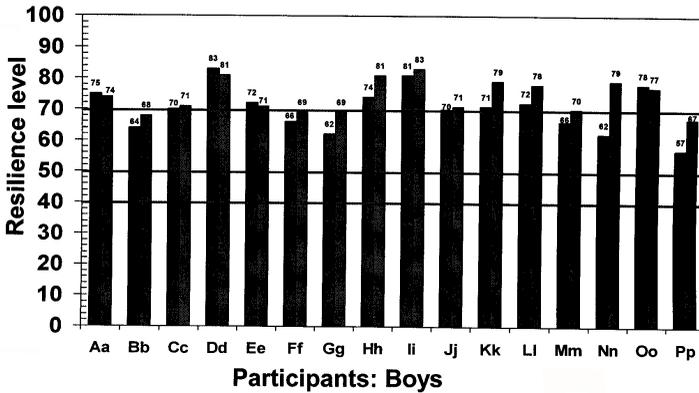


Figure 2 Resiliency scale

management and communication of emotions; ego-control) followed by the social competence (sense of self). The results from the Resiliency Scale for learners revealed that half of the female participants compared to a third of the male participants viewed themselves as average in resilient functioning while the rest of the participants viewed themselves as very resilient after participating in the Resilience Enhancement Kit. This implied that the male participants in this study appeared to view themselves as more resilient than the female participants. It was also found that there were some items identified by the female and male participants, respectively, that were gender specific. Child-rearing practices, social scripts and roles as well as naturalistic tendencies may all have an impact on the way middle adolescents respond in a gender specific way, such as the difficulties male participants had in expressing emotions and female participants had in manipulating people or situations to get what they wanted.

The means of the emotional, social and cognitive competencies regarding the middle adolescents' scores in the Resiliency Scale were taken into account after the Resilience Enhancement Kit was administered and the post-test phase completed (Figures 3 and 4). The social resilience competencies were dominant in the female and male participants' lives. After administering the Resilience Enhancement Kit there was an increase of 6 points in the social competency for females and an increase of 4 points for males. The second dominant competence in both the females' and males' lives appeared to be the emotional resilience competencies. There was a 3-point increase in this competency in females and a 3-point increase in males after administering the Resilience Enhancement Kit. The competency in need of further development was the cognitive resilience competency. Although there was an increase after participating in the Resilience Enhancement Kit, the female and male partici-

pants viewed this as an area for growth. The female participants showed a 5-point increase and the male participants a 3-point increase in this competency.

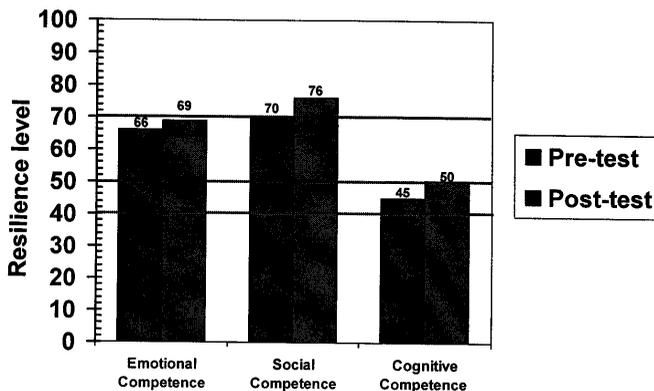


Figure 3 Resiliency scale: Girls

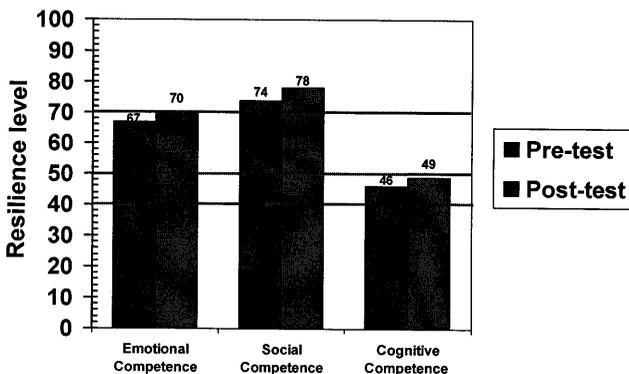


Figure 4 Resiliency scale: Boys

The comparison of the teachers' scores with the learners' scores indicated that the learners experienced themselves more resilient than the teachers viewed them (Figure 5). There was a decrease of 24 points in the teachers' scores. This could be contributed to the teachers' lack of knowledge regarding the learners' history of how they rebounded after adversity but it could also be due to the middle adolescents' idealized view of their competencies in dealing with life's stressors. One of the significant items, that the learners identified, was a need for a teacher that they could trust, who would listen to them and who cared about them. The learners indicated that they experienced the teachers (significant role players in the school context) as uninvolved in helping them cope against the onslaughts of life.

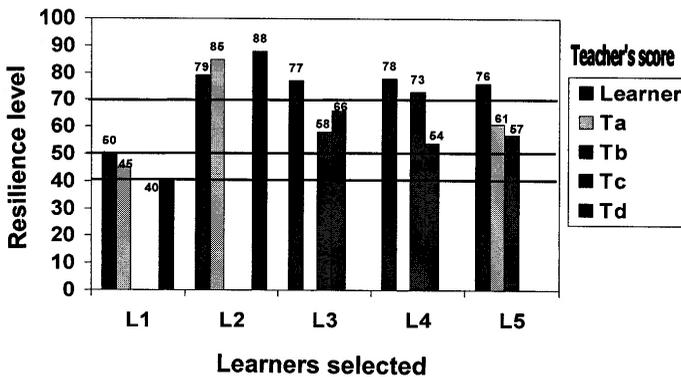


Figure 5 Resiliency scale: Teachers

## Conclusion

The findings indicated that:

- Six of the nine female participants viewed themselves as very resilient and three participants viewed themselves as average in resilient functioning. Twelve of the 16 male participants viewed themselves as very resilient and four participants viewed themselves as average in resilient functioning. This implied that the majority of middle adolescents in this study viewed themselves as resilient. The results indicated that the male participants viewed themselves more resilient than the female participants. It must be borne in mind however that these results relied on subjective responses given by the middle adolescents and might not reflect an unbiased view regarding the level of their resilient functioning.
- The comparison of the results of the middle adolescents' responses in the

pre- and post-tests after administering the Resilience Enhancement Kit indicated that there was an increase in their perceived level of resilient functioning. This implied that the Resilience Enhancement Kit appeared to be successful in developing and enhancing the resilience modalities of middle adolescents.

- There appeared to be a difference between the teacher's perceptions regarding the learners' level of resilience compared to the scores of the learners themselves in the pre-test phase. The learners identified a need for teachers to be more involved in their support and in guiding them to be more resilient.
- This study indicated that there appears to be a need to enhance the resilience modalities of learners. The literature indicated that due to the continuum on which resilience is found, there are some modalities in which the middle adolescents feel more resilient (social competence) and others in which they have a need for further assistance (emotional competence and cognitive competence).

The correlation in the answers provided by the middle adolescents in the pre- and post-test, after a period had elapsed, was an indication of the reliability of the instrument. The proportional scattering of answers on the scale related to the differentiated aspects of resiliency modalities reflected the validity of the instrument. Therefore, the Resiliency Scale appeared to be an appropriate instrument for measuring the levels of resilient functioning in middle adolescents. The increase in the learners' level of resilient functioning indicated that the Resilience Enhancement Kit appeared to be successful in enhancing and developing resilience modalities.

### **Limitations**

One of the limitations of the research was that the results were gained from a small percentage of the South African middle adolescent population. The research was also context specific (inner-city school) and the results may therefore not be generalised because the results could differ in other contexts (e.g. rural areas).

It was found that the timeframe for the sessions was constricting because the learners needed more time to consolidate the new skills, attitudes and knowledge gained in the sessions as well as to form relationships.

Two of the teachers did not complete the Teachers Scale in full and therefore the data could not be used in the research. Another area of concern was the absenteeism of five learners in the period the post-test was administered and, as a result, they could not be included in the research.

The Resiliency Scale should not be considered as an instrument to assess levels of resilience in middle adolescents and should be used in conjunction with other methods, owing to the subjective nature of the learners' answers.

A word of caution must be given that, due to the focus on group work in the Resilience Enhancement Kit, some of the classes with larger learner popu-

lations may experience difficulties and therefore team-teaching might be necessary to manage the groups effectively.

### **Recommendations**

In the light of the findings it is recommended that:

- Teachers could aid in fostering competencies by structuring and planning activities, assignments and lessons to incorporate competencies as well as integrating and utilizing the middle adolescents' innate abilities, interest, experiences, learning styles and prior-knowledge.
- Educational psychologists can be employed by the schools to identify middle adolescents who are potentially at risk and to work with them, their teachers, and their parents with the aim of enhancing resilience modalities.
- Educational psychologists can be employed to administer the Resilience Enhancement Kit to the learner population and in so doing assist the teachers who already have a comprehensive workload.
- The educational psychologists can train teachers in how to administer the Resilience Enhancement Kit.
- Research should be undertaken to administer the Resilience Enhancement Kit to middle adolescents from other contexts, for example, rural areas, to obtain a holistic view of the level of the middle adolescents' resilient functioning.
- It is recommended that the Resilience Enhancement Kit should be administered over a year to ensure that the competencies are internalized and consolidated. The sessions can be expanded in this time to include more activities and reinforce new knowledge, skills and attitudes.
- The Resilience Enhancement Kit can be expanded to include more activities that would foster competencies. An area where the middle adolescents appeared to need more assistance was the cognitive competencies.
- It is suggested that the Resilience Enhancement Kit be incorporated as part of the Life Orientation curriculum to enhance and develop learners' resilience modalities.
- Educational psychologists can train parents to assist them to continuously enhance and develop the resilience modalities in children and adolescents at home as well.
- Further research into developing an objective instrument to measure resilience in the South African context is advised.
- The formative years of the middle adolescent are spent in the classroom and the significant role-players can provide the opportunities for modelling appropriate social behaviour as well as creating learning experiences for further development.

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